



PSYC 305-01E, Stats and Research Design II
COURSE SYLLABUS: Spring 2024
Tuesday-Thursday 11:00am-12:15pm, Henderson 207

INSTRUCTOR INFORMATION

Instructor: Will Whitham, Ph.D., Assistant Professor of Psychology

Office Hours: Tuesday-Thursday 12:15-2:45pm; by appointment

Office: Binion 215B

University Email Address: will.whitham@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: 24-48 hours Monday-Friday, weekends and holidays may take longer than 48 hours.

COURSE INFORMATION

Textbook(s) Required

- Nestor & Schutt, Research Methods in Psychology (3rd edition)
ISBN: 9781544323770
- Howell, Fundamental Statistics for the behavioral sciences (9th edition)
ISBN: 9781305652972

Course Description

This course is the second part of a two-part series on statistics and research methods. This course is intended to introduce you to the basic and most common methods of collecting psychological data. We will cover t-tests, ANOVA, and correlations. Special attention will be given to writing in the style of the American Psychological Association (APA).

The lab allows for additional time to discuss the materials covered in lecture and to work on applying what you have learned in lecture through developing a research paper. This research paper will be a hypothetical replication study. This project is also broken up into two semesters. This semester you will write a results and discussion section. Each week in lab will involve working on a particular portion of your research paper or doing an activity involving SPSS (a statistical analysis program). All of this will culminate in an APA style research paper.

Student Learning Outcomes (SLOs)

- 1) Learning to review the primary literature (improving library research skills, increasing familiarity with scientific writing, and reading journal articles)
- 2) Learning how research ideas are developed, including the formulation of testable hypotheses
- 3) Analysis of research results, including a basic understanding of descriptive statistics, probability, and percentiles
- 4) Produce a quality APA style report

This syllabus/schedule are subject to change.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

You need to be able to use the following.

- Microsoft Office or equivalent
- PDF
- myLeo/Desire2Learn (D2L)
- Searching the internet for texts
- Using Library resources

In addition, refer to the following: <https://carleton.ca/online/online-learning-resources/essential-technological-skills/>

Instructional Methods

This course is a face-to-face class. During our lecture, we will focus on deepening your understanding of the important concepts and theories through lectures, demonstrations, and class discussions. Prior to each week's lecture, you will be expected to complete the reading materials before the class.

Student Responsibilities or Tips for Success in the Course

Your attendance is a significant factor in student course grades. Start with attending our class and do the following basics.

- 1) Check and read class emails promptly for announcements, updates, clarifications, etc.
- 2) Take notes as you listen to lectures, read the assigned parts of the textbook to check if your listening comprehension matches with the textbook descriptions, and fill in the missing pieces.
- 3) Quiz yourself often. Can you define a concept in your own words? Can you answer 3 or 4 questions of the textbook practice questions correctly?
- 4) Review the materials on a regular basis. Consider the *Pomodoro technique*. Set aside 15-20 minutes each day and study. Do at least 3 Pomodoro sessions each week. Depending on your needs, you may need to do more. For more details, refer to "*Secrets of Student Success*" in our textbook Ch1.
- 5) Complete assigned coursework on time.
- 6) Please contact me when you have questions. The material is difficult, and no one learns everything perfectly the first time through. This class, and your time, is too important for you to spend time getting frustrated instead of learning

GRADING

Final grades in this course will be based on the following scale:

- A = 90%-100%
- B = 80%-89%
- C = 70%-79%
- D = 60%-69%
- F = 59% or Below

Makeup exams and assignments

Life happens. If illness or other circumstance prevents your completion of assignments, make-ups may be permitted at my discretion. Email me as soon as possible, and be ready to provide relevant documentation if requested. There will be no make-up exams except as mandated by University policy for University-excused absences, religious holidays and major illnesses. Students should contact the professor prior to the scheduled exam if possible, or within 24 hours of missing the exam due to accident or illness. Due dates for exams are listed below on the schedule of topics.

If you are traveling and representing the university (e.g., band members, athletes, etc.) you need to request accommodations BEFORE the exam or assignment is due, not after.

If you encounter any technical problems when you take any timed tests or assignments online, take screenshots and email me immediately for potential makeup.

This syllabus/schedule are subject to change.

Assessments

Your final grade is weighted 80% lecture and 20% lab. However, to receive a C or better in the course, students **MUST** receive a grade of C or better in BOTH the lecture and lab sections. Students who receive less than a C in either the lecture or lab will receive either an automatic D in the course, or their earned course grade if lower than D.

The procedures for lab and lecture grades are further broken by category below. The contribution of each assignment to the corresponding category (lecture or lab) appears next to each item.

Lecture

- **Exams (60%)** - There will be three exams given during the semester, plus a final exam. These four exams will be weighted equally.
- **Homework (40%)** - There will be four SPSS activities turned in for a grade. These assignments are weighted equally and are designed to increase your understanding of how to interpret SPSS output and use that output to write an APA style results section. Due dates for homework assignments are listed below on the schedule of topics.

Lab

- **LA1: Graphs (15%)** - For the graphing activity, students will submit their APA format graphs. These will be graded for accuracy.
- **LA2: Results Section (30%)** - Students will submit the results section for their paper. These will be graded for accuracy.
- **LA3: Discussion Outline (15%)** - Students will submit an outline for their discussion section. This assignment is graded pass/fail.
- **LA4: Final Paper (40%)** - Students will submit their results and discussion sections, references, and all sections from their 302 paper. Any recommended edits to the previous sections should appear in this version.

Research Participation via Sona

A goal of this class is to help you familiarize yourself with research methods. One way to obtain this goal is to have you participate in research studies. Participating in research studies contributes to students and faculty at A&M - Commerce, your understanding of how research is conducted, and human knowledge in general. All students in this class will be required to participate in the psychology department's participant pool or complete alternative assignments.

Students must complete a total of 6 Sona credits. However, if you do not have any unexcused no-shows (i.e., you do not show up for a study or show up too late), you will be required to complete only 4 sona credits. You are **only allowed to complete 50% of your Sona credits via online studies**, the remaining credits need to be completed via lab studies. Each week there are lab study schedules posted. Sign up in advance and show up on time.

When you first sign into the experiment management system (EMS), you will be asked to take a prescreen. The prescreen takes about 20 minutes to complete. If you complete the prescreen in the first two weeks of the semester, you will receive 0.5 free experiment credit. This can be combined with later experiments that are worth 0.5 credit.

The alternative to Sona research participation will be to complete an original 2-page article summary for each credit hour. The instructions and assigned articles can be found on D2L. If you choose to do the research alternative instead of the research studies, the article summaries will be due **May 5, 2024**.

Failure to complete the required number of credits will result in the reduction of your final grade by one letter grade. That is, if you have an "A" and do not complete the required credits, your final grade will be a "B."

COURSE OUTLINE / CALENDAR

Week	Chapter	Topic	Due
1	--	Introduction, Syllabus, Descriptive Statistics	
2	Howell Ch.12	One Sample t -test	HW 1 due Sunday 1.21
3	Howell Ch.13	Dependent Samples t -test	HW 2 due Sunday 1.28
4	Howell Ch.14	Two Independent Samples t -test	HW 3 due Sunday 2.4
5	Exam 1 2.8		
6	Howell Ch.16	One-Way Analysis of Variance (ANOVA)	HW 4 due Sunday 2.18
7	Howell Ch.17	Factorial ANOVA	
8	Nestor Ch.10	Factorial ANOVA + Interactions	
9	Howell Ch.15	Interactions + Power + Effect size	
10	NO CLASS :: SPRING BREAK		
11	Exam 2 3.21		
12	Nestor Ch.7 Howell Ch.9	Correlations	
13	Howell Ch.10	Regression	
14	Exam 3 4.11		
15	Nestor Ch.8-9	Experimental Design	
16	Nestor Ch.11	Quasi-experimental Design	
17		Review for Final Exam	
18	Final Exam (according to university schedule)		

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TECHNOLOGY REQUIREMENTS

myLeo Online Learning Management System

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: *Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner.* Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

Interaction with Instructor Statement

Typically, I will respond to your emails within 24 hours from Mon to Fri. It will take longer during the holidays and weekends. I can also meet with you via Zoom. Please do not hesitate to contact me if you have any questions.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Generative Text Policy

Unless authorized by me, you are expected to complete all course assignments without assistance from any source, including artificial intelligence such as ChatGPT.

Course Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

This syllabus/schedule are subject to change.

Academic Honesty

You are expected to develop original work for this course; therefore, you are not allowed to submit course work you completed for another course to satisfy the requirements for this course.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

Repeated class disruptions will be taken seriously and administrative action will be taken in cases of repeated violations.

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. Violations of academic integrity, including plagiarism and unauthorized collaboration, will result in a zero for the assignment or an F in the course at my discretion. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/graduate/13.99.99.R0.10.pdf>

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:
<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel